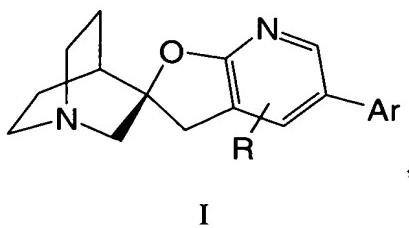


Amendments to the Claims:

This listing of claims will replace all previous versions, and listings, of claims in this application.

Listing of Claims:

1. (original) A compound having the formula:



and pharmaceutically-acceptable salts thereof, wherein

Ar is either a monocyclic 5-membered ring heterocycle or a bicyclic benzo-fused 5-membered ring heterocycle connected *via* the 5-membered ring, having, as part of the five membered ring one ring nitrogen atom and either one ring oxygen atom or one ring sulfur atom, said monocyclic or fused bicyclic ring heterocycle being substituted with 0, 1, or 2 substituents selected from C₁₋₄ alkyl, C₁₋₄ alkoxy, C₁₋₄ halogenated alkyl, C₁₋₄ oxygenated alkyl, C₂₋₄alkenyl, C₂₋₄alkynyl, halogen, -CO₂R¹, -C(O)R¹, -CN, -NO₂, -(CH₂)_nNR¹R²

n is 0, 1, or 2

R¹ and R² are independently selected at each occurrence from hydrogen or C₁₋₄alkyl

R is a substituent selected from hydrogen, C₁₋₄alkyl, C₁₋₄ halogenated alkyl, C₁₋₄ oxygenated alkyl, or halogen.

2. (original) A compound according to Claim 1 or a pharmaceutically-acceptable salt thereof, wherein:

Ar is a 5-membered ring heterocycle having one ring nitrogen atom and either one ring oxygen atom or one ring sulfur atom and having 0 or 1 substituents selected from methyl, ethyl, or halogen, and

R is hydrogen.

3. (original) A compound according to Claim1, selected from:

(2'R)-5'-(thiazol-5-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine];
(2'R)-5'-(thiazol-4-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine];
(2'R)-5'-(thiazol-2-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine];
(2'R)-5'-(2-methylthiazol-4-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine];
(2'R)-5'-(benzothiazol-2-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine];
(2'R)-5'-(oxazol-2-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine];
(2'R)-5'-(benzoxazol-2-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine];
(2'R)-5'-(3,5-dimethylisoxazol-4-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine];
(2'R)-5'-(2-trifluoromethylthiazol-4-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine];
(2'R)-5'-(2-methylthiazol-5-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine], or
(2'R)-5'-(2-trifluoromethylthiazol-5-yl)spiro[1-azabicyclo[2.2.2]octane-3,2'(3'H)-furo[2,3-b]pyridine].

4. (original) A pharmaceutical composition comprising a compound according to Claim 1, and a pharmaceutically-acceptable diluent or carrier.

5 - 13. (cancelled)

14. (original) A method of treatment or prophylaxis of human diseases or conditions in which activation of the α_7 nicotinic receptor is beneficial which comprises administering a therapeutically effective amount of a compound according to Claim 1.

15. (original) A method of treatment or prophylaxis of psychotic disorders or intellectual impairment disorders, which comprises administering a therapeutically effective amount of a compound according to Claim 1.

16. (original) The method according to Claim 15, wherein said psychotic disorder is Alzheimer's disease, learning deficit, cognition deficit, attention deficit, memory loss, Attention Deficit Hyperactivity Disorder Parkinson's disease, Huntington's disease, Tourette's syndrome, a neurodegenerative disorder in which there is loss of cholinergic synapses anxiety, schizophrenia or mania or manic depression.

17. (original) A method of treatment or prophylaxis of jetlag, cessation of smoking, nicotine addiction, craving, pain, and for ulcerative colitis, which comprises administering a therapeutically effective amount of a compound according to Claim 1.

18. (original) A compound according to Claim 1, wherein one or more of the atoms is a radioisotope of the element.

19. (original) A compound according to Claim 18, wherein the radioisotope is tritium.

20. (cancelled).